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10/633,145

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Ken L. Chang

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11/30/2010

WESTERN DIGITAL CORPORATION

ATTN: LESLEY NING / IP LAW DEPARTMENT

3355 MICHELSON DRIVE, SUITE 100

IRVINE, CA 92612

EXAMINER

BLOUIN, MARK S

ART UNIT

PAPER NUMBER

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The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

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BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

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*Ex parte* KEN L. CHANG and JOHN L. RAUEN

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Appeal 2009-008167  
Application 10/633,145  
Technology Center 2600

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Before KENNETH W. HAIRSTON, CARLA M. KRIVAK, and  
ELENI MANTIS MERCADER, *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL<sup>1</sup>

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<sup>1</sup> The two-month time period for filing an appeal or commencing a civil action, as recited in 37 C.F.R. § 1.304, or for filing a request for rehearing, as recited in 37 C.F.R. § 41.52, begins to run from the “MAIL DATE” (paper delivery mode) or the “NOTIFICATION DATE” (electronic delivery mode) shown on the PTOL-90A cover letter attached to this decision.

This is an appeal under 35 U.S.C. §§ 6(b) and 134 from the final rejection of claims 1 to 9. We will reverse.

The disclosed invention relates to a stamped actuator arm that is used in a head stack assembly. A plurality of stamped protrusions on the actuator arm support a trace suspension flex that has a metal base layer (Figs. 2-5; Spec. 2, 3, 5-7; Abstract).

Claim 1 is representative of the claims on appeal, and it reads as follows:

1. A head stack assembly for a disk drive, comprising:  
a stamped actuator arm;  
a head gimbal assembly attached to the stamped actuator arm, the head gimbal assembly including a base plate, and a trace suspension flex having a metal base layer and a plurality of conductors supported by the metal base layer;  
the stamped actuator arm including;  
an actuator arm side surface extending longitudinally along the stamped actuator arm; and  
at least two but not more than three longitudinally spaced-apart stamped protrusions, the stamped protrusions being in contact with the trace suspension flex, each stamped protrusion extending from the actuator arm side surface.

The prior art relied upon by the Examiner in rejecting the claims on appeal is:

Budde

US 2002/0163763 A1

Nov. 7, 2002

The Examiner rejected claims 1 to 9 under 35 U.S.C. § 102(e) based upon the teachings of Budde.

Appellants argue *inter alia* (Br. 4-7) that the “protrusions 208, 210, 212 in Budde are clearly not a part of an ‘actuator arm,’ as required by all of the presently pending claims” (Br. 5), and “Budde utterly fails to disclose a trace suspension flex that has a ‘metal base layer and a plurality of

conductors supported by the metal base layer,’ as required by all of the presently pending claims” (Br. 6).

Thus, we have to determine whether Budde describes an actuator arm with stamped protrusions and a trace suspension flex that has a metal base layer and a plurality of conductors supported by the metal base layer.

According to Budde (¶¶ 0028, 0029; Abstract; Fig. 2), the protrusions (i.e., interconnect attachment tabs) 208, 210, and 212 are formed on suspension 200 “that is later swaged to an actuator arm.” The actuator arm described by Budde, therefore, does not include protrusions 208, 210, and 212 as required by the claims on appeal. Although Budde describes a flex circuit that is woven through the protrusions 208, 210, and 212 (¶ 0029; Abstract), Budde is completely silent as to the flex circuit having “a metal base layer and a plurality of conductors supported by the metal base layer.” The Examiner contends (Ans. 8) that “one of ordinary skill in the art would understand that a metal base layer with a plurality of conductors is inherent to the structure and function of a flex circuit,” but nothing in the record supports the Examiner’s contention that a flex circuit necessarily includes a metal base layer with a plurality of conductors.

In summary, the Examiner erred by finding that Budde has: an actuator arm that includes stamped protrusions, and a flex circuit having a metal base layer and a plurality of conductors supported by the metal base layer. Accordingly, the anticipation rejection of claims 1 to 9 is reversed because each and every limitation in the claims is not found either expressly or inherently in the cited reference to Budde. *In re Crish*, 393 F.3d 1253, 1256 (Fed. Cir. 2004).

The decision of the Examiner is reversed.

Appeal 2009-008167  
Application 10/633,145

REVERSED

gvw

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